DRO Technology Session

December 7, 2004

Frank Eng, Computer Sciences Corporation

Session Overview

- **Technology for: 1) DRO service providers (e.g., meteorological & space agencies), 2) DRO users, and 3) DRO industry (e.g., vendors)**
- **Evolving DRO requirements continue to put greater demands on technology**
- **Current and "near term" technology responses to evolving DRO requirements, with a focus on DRO receivers**

Session Format

1. “Leading edge” Technology Presentations
2. Technology Panel Discussion
   - Requirements
   - Technological alternatives
   - Technology forecasts
3. Live Technology Demonstration

Driving Requirements

- **Band (e.g., VHF, L, X, C , Ku bands)**
- **Data rate**
- **G/T**
- **Tracking**
- **Reliability**
- **Data format**
- **Product generation and management**
- ***Flexibility and transition***

Receiver
Technical Elements

1. Satellite tracking and signal acquisition
2. RF/IF processing
3. Demodulation and decoders
4. Ingesting
5. Product generation management

Technology Discriminators

1. **Functionality and Performance**
2. **Cost, cost and more cost (LCC)**
3. **Flexibility**

Technology Summary

- **Requirements in transition**
  - **Environments**
  - **Systems and services**
  - **Users**
- **Technology in transition**
- **Industry technology response**


DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA


NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE